I. AMENDMENTS

IN THE CLAIMS

Cancel claims 50-52, and 58-82 without prejudice to renewal.

Please enter the amendments to claims 42, 45, 46, 49, 54, 56, 57, 83, 86-88, 90-92, 95-97, 99, and 100, as shown below.

1-41. (Canceled)

42. (Currently amended) A method for producing a merozoite surface protein-1 (MSP-1) ~~gp190/MSP1 protein~~ of a *Plasmodium*, wherein the MSP-1 protein has a molecular weight in a range of 190 kD to 220 kD, and wherein the MSP-1 protein has ~~having an approximate weight of 190kD and having~~ a signal peptide and an attachment signal, the method comprising expressing a nucleotide sequence encoding the MSP-1 ~~gp190/MSP1~~ protein in a single expression vector, wherein the adenine and thymine (AT) content of the expressed nucleotide sequence encoding the ~~gp190/MSP1~~ MSP-1 protein is less than the AT content of [[a]] the corresponding naturally occurring nucleotide sequence encoding ~~a gp190/MSP1~~ the MSP-1 protein.

43. (Original) The method of claim 42, wherein the *Plasmodium* is a strain of *Plasmodium falciparum*.

44. (Original) The method of claim 43, wherein the strain of *Plasmodium falciparum* is *P. falciparum* strain PFB-1.

45. (Currently amended) The method of claim 42, wherein the AT content of the expressed nucleotide sequence is reduced from about 74% to about 55%.

46. (Currently amended) The method of claim 42, wherein the expressed nucleotide sequence encoding the ~~gp190/MSP1~~ MSP-1 protein is set forth in SEQ ID NO:2.

47.-48. (Canceled)

49. (Currently amended) The method of claim 42, wherein the expressed nucleotide sequence encodes ~~a gp190/MSP1~~ an MSP-1 protein having the amino acid sequence consisting of amino acids 1-1639 of SEQ ID NO:3.

50.-53. (Canceled)

54. (Currently amended) The method claim 42, wherein the expressed nucleotide sequence is expressed in an *Escherichia coli* (*E.coli*) strain.

55. (Original) The method of claim 54, wherein the *E. coli* strain is DH5alphaZ1.

56. (Currently amended) The method of claim 42, wherein the expressed nucleotide sequence is expressed in an expression system selected from the group consisting of HeLa cells and CHO cells.

57. (Currently amended) The method of claim 42, wherein the expressed nucleotide sequence is expressed in an expression system selected from the group consisting of *Toxoplasma gondii* and *Leishmania*.

58.-82. (Canceled)

83. (Currently amended) A method for producing a merozoite surface protein-1 (MSP-1) ~~gp190/MSP1 protein~~ protein of a *Plasmodium*, wherein the MSP-1 protein has a molecular weight in a range of 190 kD to 220 kD, and wherein the MSP-1 protein lacks ~~having an approximate weight of 190kD and lacking~~ an attachment signal, the method comprising expressing a nucleotide sequence encoding the ~~gp190/MSP1~~ MSP-1 protein in a single expression vector, wherein the adenine and thymine (AT) content of the expressed nucleotide sequence encoding the ~~gp190/MSP1~~ MSP-1 protein is less than the AT content of [[a]] the corresponding naturally occurring nucleotide sequence encoding ~~a gp190/MSP1~~ the MSP-1 protein.

84. (Previously presented) The method of claim 83, wherein the *Plasmodium* is a strain of *Plasmodium falciparum*.

85. (Previously presented) The method of claim 84, wherein the strain of *Plasmodium falciparum* is *P. falciparum* strain PFB-1.

86. (Currently amended) The method of claim 83, wherein the AT content of the expressed nucleotide sequence is reduced from about 74% to about 55%.

87. (Currently amended) The method of claim 83 [[42]], wherein the expressed nucleotide sequence encodes ~~a gp190/MSP1~~ an MSP-1 protein having the amino acid sequence consisting of amino acids 1-1621 of SEQ ID NO:3.

88. (Currently amended) The method claim 83, wherein the expressed nucleotide sequence is expressed in an *Escherichia coli* (*E.coli*) strain.

89. (Previously presented) The method of claim 88, wherein the *E. coli* strain is DH5alphaZ1.

90. (Currently amended) The method of claim 83, wherein the expressed nucleotide sequence is expressed in an expression system selected from the group consisting of HeLa cells and CHO cells.

91. (Currently amended) The method of claim 83, wherein the expressed nucleotide sequence is expressed in an expression system selected from the group consisting of *Toxoplasma gondii* and *Leishmania*.

92. (Currently amended) A method for producing merozoite surface protein-1 (MSP-1) ~~a gp190/MSP1 protein~~ of a *Plasmodium*, wherein the MSP-1 protein has a molecular weight in the range of from 190 kD to 220 kD, and wherein the MSP-1 protein lacks ~~having an approximate weight of 190kD and lacking~~ a signal peptide and an attachment signal, the method comprising expressing a nucleotide sequence encoding the ~~gp190/MSP1~~ MSP-1 protein in a single expression vector, wherein the adenine and thymine (AT) content of the expressed nucleotide sequence encoding the ~~gp190/MSP1~~ MSP-1 protein is less than the AT content of [[a]] the corresponding naturally occurring nucleotide sequence encoding ~~a gp190/MSP1~~ the MSP-1 protein.

93. (Previously presented) The method of claim 92, wherein the *Plasmodium* is a strain of *Plasmodium falciparum*.

94. (Previously presented) The method of claim 93, wherein the strain of *Plasmodium falciparum* is *P. falciparum* strain PFB-1.

95. (Currently amended) The method of claim 92, wherein the AT content of the expressed nucleotide sequence is reduced from about 74% to about 55%.

96. (Currently amended) The method of claim 92, wherein the expressed nucleotide sequence encodes ~~a gp190/MSP1~~ an MSP-1 protein having the amino acid sequence consisting of amino acids 20-1621 of SEQ ID NO:3.

97. (Currently amended) The method claim 92, wherein the expressed nucleotide sequence is expressed in an *Escherichia coli* (*E.coli*) strain.

98. (Previously presented) The method of claim 97, wherein the *E. coli* strain is DH5alphaZ1.

99. (Currently amended) The method of claim 92, wherein the expressed nucleotide sequence is expressed in an expression system selected from the group consisting of HeLa cells and CHO cells.

100. (Currently amended) The method of claim 92, wherein the expressed nucleotide sequence is expressed in an expression system selected from the group consisting of *Toxoplasma gondii* and *Leishmania*.